

**AMENDMENTS TO THE SPECIFICATION:**

Please replace the paragraph beginning at page 6, line 7, with the following rewritten paragraph:

--A preferred embodiment of the present invention will be described ~~hereinbelow~~ with reference to the accompanying drawings. In the following description, well-known functions or constructions are not described in detail since they would obscure the invention in unnecessary detail.--

Please replace the paragraph beginning at page 6, line 11, with the following rewritten paragraph:

--Referring to the FIG. 2, ~~4a, 4b and 4e~~, an active radio frequency cavity amplifier (ARFCA) of the present invention is designated by the reference numeral 10. The ARFCA includes two independently tunable resonant cavities 12, 14 (see FIGS. 2 and 4A). The cavities 12, 14 are mated together by a center plate 16 on which a plurality of transistors 18 are mounted. The cavity 12 is coupled to input leads of the plurality of transistors 18, and thus, is referred to as the input cavity. Similarly, the cavity 14 is coupled to output leads of the plurality of transistors 18 and likewise is referred to as the output cavity. --

Please replace the paragraph beginning at page 9, line 11, with the following two rewritten paragraphs:

--In other words, with reference to FIG. 4A which illustrates a partial schematic diagram of the ARFCA 10 as seen along line 4A-4A of FIG. 2 and FIG. 4B which shows an enlarged partial view of FIG. 4A illustrating the coupling of the conducting rods 62a, 62b of the input and output cavities 12, 14 of the ARFCA 10 to a respective transistor 18, at each transistor 18, structures 62a, 70a and 72a (all three elements shown by FIGS. 4A and 4B; see also FIG. 4C which also shows elements 62a and 70a) or the coaxial coupling capacitor of the input cavity 12 couple the RF field in the input cavity 12 to the transistor's input leads 18x (FIG. 4B), and structures 62b, 70b and 72b (all three elements shown by FIG. 4A) or the coaxial coupling capacitor of the output cavity 14 couple the RF field in the output cavity 14 to the transistor's output leads 18y (FIG. 4B). As shown by FIGS. 4A and 4B, one end of the conducting rod 62a exits structure 70a and is coupled to input lead 18x in proximity to the gap "g", and one end of the conducting rod 62b is coupled to output lead 18y in proximity to the other gap "g".

In low frequency applications, a lumped chip capacitor may be used instead of the coaxial coupling capacitor. The RF field in the desired cavity mode, e.g., the  $TM_{010}$  mode, is coupled out from the cavity 14 to the load via the components of the coupling capacitor of the plunger assembly 36 of the output cavity 14. These components include the conducting circular disc 38, the dielectric disc 40, and the bottom face of the conducting cylindrical plunger 42.--